



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,376	11/19/2003	Richard C. Fickle	505,807-058	9538
8791 7590 05/04/2009 BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP 1279 OAKMEAD PARKWAY SUNNYVALE, CA 94085-4040				
EXAMINER				
HUYNH, SON P				
ART UNIT		PAPER NUMBER		
2424				
MAIL DATE		DELIVERY MODE		
05/04/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/718,376

Applicant(s)

FICKLE ET AL.

Examiner

SON P. HUYNH

Art Unit

2424

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed January 30, 2009 have been fully considered but they are not persuasive.

Applicant argues Sim does not disclose, either expressly or inherently, at least one of: (1) receiving a plurality of multimedia asset data files from a plurality of content providers; (2) receiving metadata associated with the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of MSOs; (3) receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs; (4) coordinating uploading the multimedia asset data files to video-on-demand ("VOD") servers maintained by the MSOs using an asset locator assigned to each multimedia asset data file; and (5) tracking uploading the multimedia asset data files, as recited in claim 20; or (6) coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO), as recited in claim 25 (pages 13-14, bridge paragraph).

Applicant argues Sim does not disclose receiving a plurality of multimedia asset data files from a plurality of content providers because Sim merely discloses distributing large payload files (Sim, paragraph [0072], lines 1-3; paragraph [0076], lines 7-9; paragraph [0080], lines 4-6), not multimedia asset data files. A large payload file may

merely include a large video file. It may not include the basic elements and the basic metadata associated with each element (page 14, paragraph 2). This argument is respectfully traversed.

It is noted that limitation "multimedia asset data files include the basic elements and the basic metadata associated with each element" is not recited in the claim.

Claim 20 recites "receiving a plurality of multimedia asset data files from a plurality of content providers;" Sim discloses content provider files, content, and/or large payload files (e.g., linear file or non-linear file comprises portions of movie) are received from a plurality of content providers by CMSs and/or DSs (see include, but are not limited to, paragraphs 0082, 0087, 0094, 0111, 0115, 121, 187, 206, 207, 0257, 0261, 0265, 0267). Thus the content files including content provider files, or large payload files or portions of large payload files received from a plurality of content providers is read on "receiving plurality of multimedia asset data files from a plurality of content providers".

Applicant further argues Sim does not disclose receiving metadata associated with the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of MSOs because Sim merely discloses file metadata as data related to the management of the files being stored, transferred, and manipulated in the network (Sim, paragraph [0094], lines 1-3), not the metadata associated with the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of MSOs (page 14, paragraph 3). This argument is respectfully traversed.

Sim discloses file metadata (data related to the management of the files being stored, transferred, and manipulated in the network), and/or distribution criteria are received from content providers and/or CMS. The file metadata related to block files, including content provider ID, initial popularity, block size, usage rating, media size, attributes, etc. and other information such as media file ID, track ID, etc. (see include, but are not limited to, paragraphs 0093, 0094, 102, 108, 166, 187, 206, 211-214, 0238, 0247, 0253, 0272). Thus, limitation "receiving metadata associated with the plurality of multimedia asset data files from at least one of the plurality of content providers and a plurality of MSOs" is read on receiving media file ID, track ID, block number, popularity index, or attributes, etc. associated with the plurality of large payload file or portions of large payload file, track file, media file, etc. from content provider and/or CMSs.

Applicant also argues Sim does not disclose receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs because Sim merely discloses a "popularity" index of a file (Sim, paragraph [0187], lines 1-4), not business rules provided by the MSO. The "popularity" index is a prediction of the likelihood of the file to be accessed in the near future. It does not represent a business rule. The business rule are rules related to the business aspect of the multimedia asset files such as rating filters, pricing rule, etc. Furthermore, Sim merely discloses the popularity index being provided by the content provider, not by the multiple service/system operator (pages 14-15, bridge paragraph). This argument is respectfully traversed.

It is noted that claim 20 neither recites "business rule are rules related to the business aspect of the multimedia asset files such as rating filters, pricing rule, etc." nor "a content provider is not the same as an MSO". Instead, Claim 20 recites "receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs;".

Sim discloses "popularity" index is set by the content provider (paragraphs 0187, 0128). However, the "popularity" index is provided to DS via CMS or "popularity" index is adjusted by Storage management agent (see include, but are not limited to, paragraphs 0094, 0108, 0186, 0188, 0213, 0261). Thus, the "popularity" index is provided by CMS and/or Storage Management Agent. In addition, Sim discloses the Content Management Applications are suite of tools that allow : (1) the owner of an SCDN (i.e., a service provider) to manage content provider accounts and (2) the content providers to manage their files in the SCDN. Each content provider uses a specific CMS. The service provider assigns the CMS used by the content provider to a specific Station. When a Content Provider assigned to a CMS, the CMS propagates the Content provider information and the IP address of the CMS to the entire SCDN via its assigned DS using FDF "infor" packet. The Content provider Applications includes tools that may be located on the CMS (see include, but are not limited to, paragraphs 0257-0269). Thus, the limitation "receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs;" is read on receiving "popularity index", assigned information, or content provider storage reservation, what distribution station/node are assigned to store a particular

content file, etc. provided by CMS and/or service provider and/or Content management application located in CMS, the "popularity" index, assigned information, etc. corresponding to large payload file, media file, media block file, or portions of large payload file and being identified by CMS and/or service provider Content Management application.

Applicant additionally argues Sim does not disclose "coordinating uploading the multimedia asset data files to video on demand (VOD) servers maintained by the MSOs using an asset locator assigned to each multimedia asset data file" because Sim merely discloses a content provider uses content management applications running on a Content Provider Client System to upload a content and file metadata onto a Content Management Server (Sim, paragraph 0094, lines 1-6), not coordinating uploading the multimedia asset data files to VOD servers maintained by the MSOs. Furthermore, Sim merely discloses uploading the content to a CMS, not to a VOD server. A CMS merely gives the content provider a vehicle to upload large files (e.g., video) to the distribution centers. The CMS does not distribute the video on demand, or based in the demand of the viewers. Sim merely discloses using content management applications that run on a Content Provider Client system to upload a content, not using an asset locator assigned to each multimedia asset data file. The content management application merely performs the uploading function of the file provided by the content provider (page 15, paragraphs 3-6). This argument is respectfully traversed.

Content provider uses content management application running on a Content Provider Client system is only one embodiment in Sim. Sim also discloses the Content

Management Applications include tools that may be located on the CPC, the CMS, and the SCDN stations (paragraphs 0258, 264). Thus, Sim also discloses the Content Management Applications include tools that may be located on the CMS, and the SCDN.

Sim further discloses CMS divides the uploaded files into track files and issues a command similar to the FDF "up" command for each track file to the distribution server located in node B. CMS also issues commands to DSs to distribute the files to other nodes, or to store files, track files, etc. at different distribution stations and servers. The control unit service management subsystem manages the station's DSs and VFCS server. Storage Management Subsystem monitors cluster storage usage, supports content rating and pruning, and notifies the CMS of the storage usage of each content provider. Service Management Subsystem monitors and control services based on threshold setting... (see include, but are not limited to, paragraphs 0108, 0111, 0175, 186, 0189, 0238, 0254-0261, 0272). Sim further discloses particular content files or track files, or portions of large payload file are distributed to assigned distribution stations and/or nodes for providing to users are based on user requests/user usage. As block files are downloaded, the metadata of the content file is updated to register the existence of the block files in the local storage volume (see include, but are not limited to, paragraphs 0115, 0128, 0150, 0155, 0166-0167, 0186, 0189, 0217, 0238-0244, 0253, 0272). Thus, limitation "coordinating uploading the multimedia asset data files to video on demand (VOD) servers maintained by the MSOs using an asset locator assigned to each multimedia asset data file" is read on uploading or distributing the

large payload files and/or track files and/or portions of the media files to distribution stations, local stations, nodes, etc., based on file usage or user request and assigned information, the CMS and/or Storage Management Subsystem monitors and controls the media file and/or track file stored in Distribution stations, nodes such as deleting least popular file, store popular file, etc. using file ID, content provider ID, content ID, etc. assigned to media file, track file.

Applicant then argues Sim does not disclose, either expressly or inherently, "tracking uploading the multimedia asset data files because uploading merely transfers the content to the CMS. It does not track the file. It does not track the location and status of the file (page 15, paragraph 7). This argument is respectfully traversed.

Limitation "track the location and status of the file" is not recited in the claim. Claim 20 recites "tracking uploading the multimedia asset data files". Sim discloses "put ack" packet when the entire track file is received to indicate successful transmission. After receiving the track file, stores the block files in local storage, and updates the file metadata to reflect the track, block, and location information (paragraph 0094). Sim further discloses sending different "ack" response to indicate the status of transmission of track file, large payload file, or media files or delete least likely to be used file, or monitor usage of media file, etc. (see include, but are not limited to, 0097, 0102, 0121, 0134, 0166, 0186, 206, 217, 253, 260-267, 272). Thus, limitation "tracking uploading the multimedia asset data files" is interpreted as tracking uploading/distributing large payload file, track file, block files, or media files to CMS and/or distribution stations to

determine whether the file is received, whether the file is popular or least likely to be used, whether the file is stored in particular storage device, or whether the file is received and stored at particular distribution station, etc.

Applicant argues Sim does not disclose, expressly or inherently, coordinating uploading the metadata and the content to a server for delivery to and end user according to scheduling and business rules provided by a multiple service or systems operators (MSO) because Sim merely discloses a content provider uses content management applications running on a Content provider Client system to upload a content and file metadata onto a CMS... (pages 16, paragraph 2). This argument is respectfully traversed.

the limitation "coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or system operator (MSO)" is read on uploading or distributing the large payload files and/or track files and/or portions of the media files and file metadata and/or distribution criteria to CMS, distribution stations, local stations, nodes, etc., for delivery to an end user according to file usage or user request, assigned information, "popularity" index, etc. provided by the CMS and/or service provider and/or content provider – see include, but are not limited to, paragraphs 0102, 0108, 0104, 0113, 0115, 0128, 0166, 0175, 186-190, 209-213, 217, 253, 257-267 and discussion above).

Since Sim teaches or disclose all claimed elements, rejection under 35 U.S.C 102(e) is proper.

With respect to Applicant's arguments that Sim in view of Ellis 744 and Thomas does not disclose "receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or system operator ("MSO"), the multimedia asset data file being delivered to end users upon requested (page 19, paragraphs 2-3), the Examiner respectfully traversed.

Sim discloses receiving file metadata and/or file distribution criteria comprising media file, track ID, block number, popularity index of media file, block size, or track file indices, etc. associated with larger payload file, portions of large payload, or track file, etc. provided by content provider and/or CMS, the large payload file, track file, block file, or portions of large payload file being delivered to end user in response to user request (see include, but are not limited to, paragraphs 94,108,115,134,150,166,211-213) is read on limitation "receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or system operator ("MSO"), the multimedia asset data file being delivered to end users upon requested,"

In addition, the limitation ""receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multiple service or system operator ("MSO"), the multimedia asset data file being delivered to end users upon requested" also alternatively interpreted as receiving metadata such as title, identifier, rating information, etc. of program or episode provided by data source and/or main facility, the program and/or episodes of series being delivered to end users at user

television equipments upon requested (see include, but are not limited to, Ellis 744: paragraphs 0006, 0037-0039, 0077-0078, 0102).

With respect to Applicant's argument that Sim in view Ellis and Thomas does not disclose "validating the multimedia asset data file and the associated metadata by determining if the multimedia data asset file and the associated metadata comply with business rules provided by the MSO (page 19), the Examiner respectfully traversed.

Sim discloses MCS and/or service provider and/or Storage Management Subsystem and/or Content Management located at the CMS determines whether large payload file received at the CMS in non linear file or non-linear file and performs function according type of media file received (paragraphs 0086-0087), determines whether to prevent a content provider to uploading any new content when the content provider storage is low (paragraph 0189), whether to adjust "popularity" index of the file, whether to modify, to delete, or to store particular track file, media file at storage device at particular distribution stations, or to update metadata registered in particular distribution station (see include, but are not limited to, paragraphs 86-87, 102, 108, 134, 166, 175, 186, 189, 209-213, 253, 257-267). Thus, the limitation "validating the multimedia asset data file and the associated metadata by determining if the multimedia data asset file and the associated metadata comply with business rules provided by the MSO" is read on validating the large payload file and/or media file comprising track files, block files, and associated metadata such as track ID, media file ID, etc. by determining if the large payload file, media file, track file, etc. and track ID, popularity index of the

file, media file, etc. comply with business rules such as whether the media file, track file, etc. and associated track ID, popularity index, etc. uploaded/received at assigned MCS, assigned storage device, whether to adjust popularity index of a file, whether to prevent uploading new file, etc. according assigned information or policy, content provider account information, etc. provided by (stored at) service provider and/or CMS and/or Content management Application server with Content Management Application.

In addition, the limitation ""validating the multimedia asset data file and the associated metadata by determining if the multimedia data asset file and the associated metadata comply with business rules provided by the MSO" is also read on Ellis' disclosure (incorporated by Thomas' reference) of validating program and/or episode and/or advertisement and the associated identifier, rating, time, etc. of the program or episodes of series or advertisement by determining if the program, episodes of program, advertisement comply with business rules (e.g., information in user profile, usage information, authorization information, etc.) provided by (stored at) television distribution facility before recording or providing program, episodes of program and/or advertisements to television user (see include, but are not limited to, Ellis 744: paragraphs 0077, 0102, 0109, 0123; Thomas: paragraphs 0041, 0069).

With respect to Applicant's argument that Sim in view of Ellis and Thomas does not disclose "coordinating delivering the multimedia asset data file and associated metadata to a video on demand (VOD) server maintained by the MSO, wherein coordinating delivering comprises (3a) tracking distributing the multimedia asset data file from the

content provider to the MSO, and (3b) tracking uploading the multimedia asset data file from the MSO to the VOD server (pages 19-20), the Examiner respectfully traversed.

Sim discloses content provider(s) provide(s)/upload(s) large payload file and metadata to assigned CMS, or content provider is prevented to upload any new content when the content provider storage is low and/or CMS distributes and stores large payload file, track file, etc. to assigned storage device at distribution station based on popularity index of the file, the content is provided to user based on user request is read on "coordinating delivering the multimedia asset data file and associated metadata to a video on demand (VOD) server maintained by the MSO" (see discussion regarding "coordinating..." above).

the limitation "tracking distributing the multimedia asset data file from the content provider to the MSO" is read on tracking whether to prevent distributing/uploading any new content from content provider when the content provider's storage is low (par.0189), or tracking whether the content provided/uploaded from content provider to CMS is linear file or non-linear file (paragraphs 86-87), or tracking/monitoring whether large payload file, content distributed/uploaded by content provider to CMS/DS is received via "ack" response or notification (see include, but are not limited to, paragraphs 0094, 0102, 108, 0257-0269). The limitation of "tracking uploading the multimedia asset data file from the MSO to the VOD server" is read on tracking distributing the large payload file, content, track file, etc. from the CMS and first level distribution station (e.g., distribution station connected to CMS assigned to content provider) to lower level distribution stations or nodes in order to update metadata

registered in the storage device, or to determine whether the file is popular, least likely to be used, or whether the file is received at the assigned distribution station, node, etc. (see include, but are not limited to, paragraphs 102, 108, 111, 134, 166, 186-189, 217, 0264-0269).

With respect to Applicant's argument Sim in view of Ellis and Thomas does not discloses "providing usage reports relating to usage of multimedia asset data files by end users of the MSO" because Ellis disclose viewing histories relate to the program viewing. It does not correspond to usage of the multimedia asset data files such as listing of multimedia content that has been licensed, content that is available for distribution to the users, the estimated time an asset data file will be delivered to the MSO, etc. (pages 20-21), the Examiner respectfully traversed.

the claim does not recite "usage of the multimedia asset data files such as listing of multimedia content that has been licensed, content that is available for distribution to the users, the estimated time an asset data file will be delivered to the MSO, etc.", but instead, the claim 1 recites ""providing usage reports relating to usage of multimedia asset data files by end users of the MSO." Sim discloses providing usage information/usage statistics relating to usage of large payload file, media content, track file, etc. by end users of the Distribution Station and/or CMS (see include, but are not limited to, paragraphs 0182, 188, 190, 192, 197, 202, 224, 269). However, Sim does not explicitly disclose usage reports relating to usage of multimedia asset files by end users of the MSO.

Ellis 744 discloses providing usage reports or viewing history relating to usage of video program, or television program, or advertisement by end users of television distribution facility (see include, but are not limited to, paragraphs 107-108, 125-126; Thomas, paragraphs 0070-0075) is read on providing usage reports relating to usage of multimedia file by end users of MSO. Therefore the combination of Sim and Thomas discloses providing usage reports relating to usage of multimedia asset data files by end users of the MSO.

In response to applicant's argument that there are significant differences between the cited references and the claimed invention and there is no apparent reason to combine the known elements in the manner as claimed (page 18, paragraph 1, page 23, paragraphs 2-3), it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Thomas is incorporated by reference in its entirety in Ellis (see Ellis: paragraph 108). Thus, Thomas reference is treated as part of the specification of Ellis. Furthermore, all the cited references disclose system for providing television program, information associated with television program, tracking usage data of media content (see, include, but are not limited to, Sim: figures 3-6, 9-10; Ellis: figures 1-7).

In addition, discussing the question of obviousness of claimed subject matter involving a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727

(2007), explains: When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida [v. AG Pro, Inc., 425 U.S. 273 (1976)]* and *Anderson's-Black Rock*.

Since all claimed elements are known in the art, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching of providing usage information/viewing history as "reports" as taught by Ellis in order to yield predictable results such as to generate viewing recommendation, to target advertisement to user (see paragraph 10), or to track usage information easily.

Therefore, the combination of the references is proper.

With respect to rejections of claims 41-55, Applicant argues Sim and Ellis '800 does not disclose at least one of (1) an external layer to interface to an application client; (2) a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines comprising: a workflow engine to manage workflow of ingesting a content and metadata associated with the content provided by a content provider, coordinating distribution of the metadata and the content, and coordinating uploading the metadata and the content to a server for delivery to an end

user according to scheduling and business rules provided by a multiple service or system operator (MSO); and (3) a relational database to store the metadata because none of the cited figures or paragraphs discloses components of a content management system, or a workflow engine that performs the tasks as recited in the rejected claims. Figure 5 merely shows a content management system 570 but does not show its components. None of the tools discloses coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems operator (MSO). Ellis discloses a program guide application 70 and an associated API 72... A program guide application provides program information to television viewer. It is not a content management system, none of these non-program guide application corresponding to uploading the metadata and the content to a server...(pages 21-22). This argument is respectfully traversed.

It is noted that definition of "component" comprises: 1. *A constituent element, as of a system. See synonyms at element.* 2. *A part of a mechanical or electrical complex.*

If the content management system does not comprise components, how can the content management system exist and perform the functions such as receiving content and data from content providers?

It is further noted that the program guide application is not a content management system. However, Ellis discloses the content program application is implemented in a system (e.g., server 59) -see include, but are not limited to, paragraph 0070, figure 1). Thus, the content management system is read on system (e.g., television distribution

facility) comprising server that implements API. Ellis also discloses uploading the metadata and the content to a server according to scheduling and business rules provided by a MSO (interpreted as the API implemented at a server for controlling/coordinating uploading or providing program guide information and other information associated with VOD, banking, game service, etc. and VOD content, banking content, game content, etc. to a media server at television distribution facility or at different nodes for delivering to an end user at user television equipment according to scheduling and policy, rules, or conditions provided by (or stored at) user television distribution facility (see include, but are not limited to, figures 1-2, 31, paragraphs 0070, 125).

Furthermore, the content component system and limitations such as uploading... are already taught by Sim as discussed in the rejection and above.

In fact, Sim discloses a content management system (interpreted as CMS and/or one or more distribution stations) comprising an external layer to interface to an application client (layer for providing interface for content provider to upload/provide content and data to CMS – see include, but are not limited to, 0082, 0096, 0257-0267), a relational database to store the metadata (e.g., storage for storing metadata such as media ID, track ID, provider information of the media file, etc. - see include, but are not limited to, figures 7, 20, paragraphs 102, 166, 206, 238, **259**, 265); Sim further discloses using (API) (see paragraph 32) and other claimed limitation including coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or systems

operator (MSO) (see discussed above). However, Sim does not explicitly disclose a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines.

Ellis'800 is relied on for the teaching of API coupled to external layer to interface to a plurality of engines (see include, but is not limited to, figure 2). Therefore, the combination of Sim and Ellis '800 teaches all the limitations as claimed.

In response to applicant's argument that there is no suggestion to combine the references (pages 22-23), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, suggestion or motivation to combine the references is found in the knowledge generally available to one of ordinary skill in the art.

For the reasons given above, rejections on the claims are sustained and discussed below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 20-21, 25-29, 33-34, 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Sim et al. (US 2002/0078174 A1).

Regarding claim 20, Sim discloses a method comprising:

receiving a plurality of multimedia asset data files from a plurality of content providers (interpreted as the content files comprising content provider files, or large payload files or portions of large payload files received from a plurality of content providers - see include, but are not limited to, paragraphs 0076, 0094, 0111, figure 5 and discussion in "response to arguments" above);

receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a plurality of ("MSO") (receiving metadata and other information such as track ID, media file ID, etc. associated with large file (e.g., video) provided by content provider or a multimedia service or content management server (CMS), the large file/asset of large file - see include, but are not limited to, paragraphs

0076-0077, 0080, 0082, 0102, 0166, 0206-0213 and discussion in "response to arguments" above);

receiving business rules provided by the MSO, the business rules corresponding to the multimedia asset data file and being identified with particular MSOs (interpreted as receiving "popularity index", assigned information, or content provider storage reservation, what distribution station/node are assigned to store a particular content file, etc. provided by CMS and/or service provider and/or Content management application located in CMS, the "popularity" index, assigned information, etc. corresponding to large payload file, media file, media block file, or portions of large payload file and being identified by CMS and/or service provider Content Management application see include, but are not limited to, paragraphs 0186-0204 and discussion in "response to arguments" above);

coordinating uploading the multimedia asset data file to a video on demand (VOD) server maintained by the MSO using an asset locator assigned to each multimedia asset data file (uploading or distributing the large payload files and/or track files and/or portions of the media files to distribution stations, local stations, nodes, etc., based on file usage or user request and assigned information, the CMS and/or Storage Management Subsystem monitors and controls the media file and/or track file stored in Distribution stations, nodes such as deleting least popular file, store popular file, etc. using file ID, content provider ID, content ID, etc. assigned to media file, track file- see include, but are not limited to, figures 5-6, 13-14, paragraphs 0108-0111, 0204-0213 and discussion in "response to arguments" above);

tracking uploading the multimedia asset data file (tracking uploading/distributing large payload file, track file, block files, or media files to CMS and/or distribution stations to determine whether the file is received, whether the file is popular or least likely to be used, whether the file is stored in particular storage device, or whether the file is received and stored at particular storage device— see include, but are not limited to, figures 5-6, 13-14, paragraphs 0102-0111, 0204 and discussion in "response to arguments" above).

Regarding claim 21, Sim teaches the method as discussed in the rejection of claim 20. Sim further discloses validating the multimedia asset data file and determining if the associated metadata comply with business rule provided by the MOSs (validating asset of large file and associated metadata according to agreement, policy, or content provider account information, etc. provided by (or stored at) CMSs, service provider and/or CMS and/or Content management Application server with Content Management Application see include, but are not limited to, 0186-0191, 0207-0213 and discussion in "response to arguments" above);

Regarding claim 25, Sim discloses a method comprising:

ingesting content and metadata associated with the content provided by a content provider (see include, but are not limited to, paragraphs 0094, 0102, 0111, 0204-0214, figure 5);

coordinating distribution of the metadata and the content (see include, but are not limited to, paragraphs 0108, 0231-0232 and discussion in "response to arguments" above);

coordinating uploading the metadata and the content to a server for delivery to an end user according to scheduling and business rules provided by a multiple service or system operator (MSO) (coordinating uploading of asset data file of large file (e.g., video) and associated metadata to CMS and/or DS for delivery to end user according to schedule and agreement/policy provided by (stored at) CMS and/or DS – see include, but are not limited to, figures 5-6, 13-14, paragraphs 0108-0111, 0186-0191, 0204-0213 and discussion in "response to arguments" above).

Regarding claim 26, Sim further discloses providing visibility into usage of the content (e.g., monitor usage information of the content, or determining most frequent accessed content, etc. - see include, but are not limited to, paragraphs 0188, 0190-0191, 0197-0202, 0217, 0253).

Regarding claim 27, Sim further discloses registering the content (see include, but are not limited to, paragraphs 0082, 0094, 0102, 0166);

coordinating accessing the content located in one or the internal location and external location (e.g., using load balancing/router, etc. - see include, but are not limited to, figures 13-20).

Regarding claim 28, Sim further discloses assigning a provider identifier to the content provider (see include, but are not limited to, paragraphs 0204-0214);

assigning a global unique identifier to the content based on the provider identifier and a provider asset identifier (e.g., assigning file name, addresses, ID, etc. to the content file based on the provider ID and provider file ID - see include, but are not limited to, 0108, 0172, 0209-0213, figure 6).

Regarding claim 29, Sim further discloses receiving the business rules from the MSO (see discussion in the rejection of claim 20);

validating the metadata and the content using the business rules (see similar discussion in the rejection of claim 21).

Regarding claim 33, Sim further discloses interacting with an asset distribution system (e.g., CMS and/or DS) to facilitate delivery of the content from a content provider to the MSO, the ADS including a pitcher and a catcher (e.g., pitcher for providing content to the DS and/or edge server and catcher for receiving content from content provider and/or another DS - see include, but are not limited to, paragraphs 0082, 0094, 0186, figures 3-7).

Regarding claim 34, Sim further discloses receiving information regarding when a transmission of an element of the content is initiated from the pitcher (see include, but are not limited to, paragraphs 0094-0098, 0102, 0109, 0213);

requesting retransmission of the content if an alarm is received from the catcher (e.g., request for missing or destroyed file if an alarm, notification or error, etc. is received from the receiver of distribution server/edge server - see include, but are not limited to, paragraphs 0166-0167, 0190, 0204);
tracking a request from a server to release the content received by the catcher (see include, but are not limited to, paragraphs 0166-0167, 0213, 0238).

Regarding claim 38, Sim further discloses preparing a usage report (e.g., usage information, history log, etc. – see include, but are not limited to, paragraphs 0267, 0269);

providing access to the usage report to a multiple service or system operator or a content provider (see include, but are not limited to, paragraphs 0186, 0267).

Regarding claim 39, Sim further discloses creating a master reporting database including usage information from across a MSO network (e.g., usage information, history information in CMS - see include, but are not limited to, paragraphs 0267, 0269).

Regarding claim 40, Sim further discloses exporting the usage report to an analysis system (e.g., providing usage information, history information, statistic information to CMS and/or content provider for analyzing usage of the content including less likely accessed file, most frequently accessed file, etc. – paragraphs 0253, 0261, 0265-0269).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19, 22-24, 30-32, 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sim et al. (US 2002/0078174 A1) in view of Ellis et al. (US 2003/0020744 A1 - hereinafter referred to as E744).

Note: US 2003/0149988 (referred to as E988) and US 20050149964 (referred to as Thomas) are incorporated by references in their entirety in E744 (see E744: paragraphs 0104, 0108). All application/patents incorporated by references in E744 in their entirety are treated as portion of the specification of E744.

Regarding claim 1, Sim discloses a method comprising:

receiving metadata associated with a multimedia asset data file provided by at least one of a content provider and a multimedia service or system operator ("MSO"), the multimedia asset data file being delivered to end users upon requested (receiving metadata and information such as track ID, media file ID, "popularity" index of the file, etc. associated with large file (e.g., video), track file, portions of the large file, provided by content provider and/or a multimedia service or content management server (CMS),

the large file/asset of large file is then provided to the end users upon request - see include, but are not limited to, paragraphs 0076-0077, 0080, 0082, 0102, 0166, 0206-0213 and discussion in "response to arguments" above);

validating the multimedia asset data file and the associated metadata by determining if the multimedia asset file and the associated metadata comply with business rule provided by the MOS (validating asset of large file and associated metadata according to agreement, policy, or content provider account information, etc. provided by CMS, service provider, Content Management Application in CMS- see include, but are not limited to, 0186-0191, 0207-0213 and discussion in "response to arguments" above);

coordinating delivering the multimedia asset data file and associated metadata to a video on demand (VOD) server maintained by the MSO (coordinating delivering of asset data file of large file (e.g., video) and associated metadata to distribution servers for providing to user upon request – see include, but are not limited to, figures 5-6, 13-14, paragraphs 0108-0111 and discussion in "response to arguments" above), wherein coordinating delivering comprises tracking distributing the multimedia asset data file from the content provider to the MSO, and tracking uploading the multimedia asset data file from the MSO to the VOD server (e.g., tracking delivering asset of large file from content provider to CMS and from CMS/distribution server to other distribution server/edge server using metadata and "ack"/notification – see include, but are not limited to, figures 5-6, 13-14, paragraphs 0102-0111, 0204 and discussion in "response to arguments" above).

Sim further discloses providing usage information relating usage of multimedia asset data file such as most frequently accessed files, usage information, etc. (see include, but are not limited to, paragraphs 0188, 0190-0191, 0197-0202, 0217, 0253). However, Sim does not explicitly disclose usage reports relating to usage of multimedia asset files by end users of the MSO.

E744 discloses providing usage reports relating to usage of multimedia asset data files by end user of the MSO (providing usage reports or viewing history relating to usage of video/television program, etc. by end user of user television equipment of the television distribution facility - see include, but are not limited to, paragraphs 0107-0108, 0125-0126; Thomas: paragraphs 0070-0075 and discussion in "response to arguments" above). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as taught by E744 in order to yield predictable results such as to generate viewing recommendation, to target advertising to the user (see abstract, paragraph 0010), or track usage information relating to content easily.

Regarding claim 2, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim further discloses the metadata are provided by at least one of the plurality of content providers and a plurality of MSOs (metadata and other information associated with media file are provided by content provider and/or CMS -

see include, but are not limited to, paragraphs 0212-0217 and discussion in "response to arguments" above).

Regarding claim 3, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim further discloses tracking distributing comprises: tracking receipt (e.g., "ack"/notification) of the multimedia asset data file in elements, the elements comprises at least one of a feature file, a preview file, a graphic file, and associated basis metadata, wherein the associated basic metadata comprises information on the elements used to confirm delivery of the elements (see include, but are not limited to, paragraphs 0094-0097, 0102, 0104, 0108-0111, 0166, 0204, 0209-0217);

Sim in view of E744 further discloses receiving an identification of the MSOs scheduled to receive the multimedia asset data file from the content provider, and receiving delivery dates for delivery of the multimedia asset data file to each of the MSOS (see include, but are not limited to, Sim: paragraphs 0094-0095, 0102, 0108-0109, 0134, 0186, 0211-0213, 0238; E744: figures 6-8c, paragraph 0039); and

receiving delivery dates for delivery of the multimedia asset data file to each of the MSOs (see include, but are not limited to, Sim: paragraphs 0094-0095, 0102, 0108-0109, 0134, 0186, 0211-0213, 0238; E744: figures 6-8c, paragraph 0039).

Regarding claim 4, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim in view of E744 further discloses tracking distributing comprises

tracking distributing using a delivery group, the delivery group comprises a plurality of multimedia asset data file (tracking delivery of video/large file comprises portions of the large file - see include, but are not limited to, Sim paragraphs 0094-0097, 0102, 0104, 0108-0111, 0166, 0204, 0209-0217).

Regarding claim 5, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim in view of E744 further discloses tracking distributing comprises:

registering the multimedia asset data file in order to identify the file, wherein registering the multimedia file comprises:

assigning a provider identifier to the content provider, and assigning a unique identifier to the multimedia asset data file provided by the content provider based upon the provider identifier and a provider asset identification, the provider asset identification being included with the multimedia asset data by the content provider (see include, but are not limited to, Sim: paragraphs: 0094, 0166-0167, 0204-0217).

Regarding claim 6, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim in view of E744 further discloses the tracking receipt comprises: staging the multimedia asset data file by entering a name for the multimedia asset data file into a staging directory (see include, but are not limited to, Sim: paragraphs 0204-0217; E744: figures 6-8c);

providing a master markup language file (file for metadata, large file, or video program), the master markup language file comprising distribution information, scheduling information, content information, and an identification for the multimedia asset data file, wherein the content information comprises data to enable retrieval of a plurality of elements to assemble the multimedia asset data file (see include, but are not limited to, Sim: paragraphs 0076-0082, 0092-0095, 0108-0111, 0166, 0204-0217, 0231-0243, 0264-0267; E744: figures 6-8c).

Regarding claim 7, Sim in view of E744 discloses the method as discussed in the rejection of claim 6. Sim in view of E744 further discloses the elements used to assemble the multimedia asset data file comprises a movie or feature file, a preview file, and a graphic file (e.g., movie - see include, but are not limited to, Sim: paragraphs 115, 121, 148).

Regarding claim 8, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim in view of E744 further discloses tracking transmission a plurality of elements of the multimedia asset data file to the MSO using a pitcher appliance (e.g., MSM, or root distribution server - see include, but are not limited to, Sim: figures 4-6, paragraphs 0094-0095, 0109, 0204-0211);

tracking receipt of the elements of the multimedia asset data file using a catcher applicant (e.g., distribution server or edge server - see include, but are not limited to, Sim: figures 4-6, paragraphs 0106, 0110, 0111, 0077, 0094, 0166);

receiving an alarm if one of the elements of the multimedia asset data file is not successfully received by the catcher application (e.g., receiving error, notification, or any information indicates the portion is not received/missing at the distribution server/edge server - see include, but are not limited to, paragraphs 0204, 0166).

Regarding claim 9, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim in view of E744 further discloses providing an asset locator identifying the multimedia asset data file to the VOD server (providing asset locator identifying the multimedia asset file to the distribution server/edge server – see include, but are not limited to, Sim: figures 15-18c, paragraphs 0166, 0206, 0209-0213, 0231-0232);

providing a schedule to the VOD server comprising instruction for the VOD server to request the multimedia asset data file from a catcher and the metadata, and tracking retrieval of the multimedia asset data file and associated metadata by initiating file transfers using the asset locator (see include, but are not limited to, Sim: figures 15-18c, paragraphs 0166, 0209-0213, 0231-0232, 0238-0244, 0253; E744: figures 21-24).

Regarding claim 10, Sim in view of E744 discloses the method as discussed in the rejection of claim 9. Sim in view of E744 further discloses using file transfer protocol (FTP) transfer (Sim: paragraphs 0081, 0115; E744: paragraph 0049).

Regarding claim 11, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. Sim in view of E744 further discloses providing an asset locator identifying an element of the multimedia asset data file to the VOD server, the VOD server submitting the asset locator to a catcher appliance (e.g., providing data file locator/identifier in metadata to the CMS, or root DS, the CMS, or root DS submits the data file locator/identifier to a another distribution server/edge server - see include, but are not limited to, figures 3-7, 13-14, paragraphs 0094, 0166, 0207-0214, 0231-0232; E744: figures 6-8c);

tracking transmission of the element from the catcher appliance to the VOD server using the asset locator to retrieve the element (tracking transmission of the file from the CMS or distribution server to another DS or edge server using asset locator/identifier to retrieve the file - see include, but are not limited to, figures 3-7, 13-14, paragraphs 0094, 0116, 0207-0214, 0231-0232).

Regarding claim 12, Sim in view of E744 discloses the method as discussed in the rejection of claim 11. Sim in view of E744 further discloses receiving an alarm from the VOD server if the element is not properly received (see similar discussion in the rejection of claim 8).

Regarding claim 13, Sim in view of E744 discloses the method as discussed in the rejection of claim 12. Sim further discloses performing a follow up or diagnosis upon receiving the alarm indicating that the element is not properly received (e.g., in

response to receiving notification, error, missing information, retransmitting or retrieving the file that is missing at the distribution server/edge server - see include, but are not to, paragraphs 0109-0111, 0166-0167, 0116-0117, 0231-0232).

Regarding claim 14, Sim in view of E744 discloses the method as discussed in the rejection of claim 9. Sim further discloses URL applies to all the servers (paragraph 0018). It would have been obvious to one of ordinary skill in the art to incorporate asset locator is asset URL in Sim in order to retrieve the asset from the Internet.

Regarding claim 15, Sim in view of E744 discloses the method as discussed in the rejection of claim 1. E744 further discloses receiving from the VOD server data on feature elements requested by end users of the MSO (e.g., receiving from node/television distribution facility viewing history, content requested by the users - see include, but are not limited to, paragraphs 0107-0108, 0125-0126; Thomas, paragraphs 0070-0075);

creating a master reporting database using the data on feature elements requested by end user (creating reporting database/ preferences profile database using viewing information/program watched by end users - see include, but are not limited to, par. 0107-0108, 0125-0126; Thomas: paragraphs 0070-0075);

generating a usage report using the data contained in the master reporting database (see include, but are not limited to, par. 0107-0108, 0125-0126; Thomas: paragraphs 0070-0075).

Regarding claim 16, Sim in view of E744 discloses the method as discussed in the rejection of claim 15. E744 further discloses creating a master reporting database as discussed in the rejection of claim 15. However, E744 does not explicitly disclose restrict access the data contained in the master reporting database using business rule by the MSO. Official Notice is taken that restrict accessing by content provider to a database using a business rule provided by service provider/MSO is well-known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim in view of E744 with the well-known teaching in the art in order to yield predictable results such as to improve security for database access.

Regarding claim 17, Sim in view of E744 discloses the method as discussed in the rejection of claim 15. E744 further discloses providing usage reports comprises: analyzing the usage report to determine end user viewing characteristics (see include, but are not limited to, par. 0107-0108, 0125-0126; Thomas, par. 0070-0075); and generating an advertising play list targeted to an end user based upon the viewing characteristic of the end user, wherein the advertising play list comprises advertising selected based upon the viewing characteristics of the end user (see include, but are not limited to, figures 19-23, para. 0009-0010, 0107-0109, 0111-0112, Thomas, figures 1-12).

Regarding claim 18, Sim in view of E744 discloses the method as discussed in the rejection of claim 17. E744 further discloses providing usage reports comprises: supplementing a multimedia asset data file with data contained in the usage report, wherein the usage report comprises usage data for the multimedia asset data file (see include, but are not limited to, paragraphs 0107-0112; Thomas, figures 1-12, paragraphs 0070-0075).

Regarding claim 19, Sim in view of E744 discloses the method as discussed in the rejection of claim 15. E744 further discloses providing usage reports comprises:

- analyzing the usage report to determine end user viewing characteristics (see include, but are not limited to, paragraphs 0107-0112, Thomas, paragraphs 0070-0075);

- selecting multimedia asset data file based upon end user viewing characteristics (see include, but are not limited to, paragraphs 0107-0112, Thomas: paragraphs 0070-0075);

- performing a campaign management function chosen from the group consisting of bundling selected multimedia asset data file, setting pricing for selected multimedia asset data files, and setting promotions for selected multimedia asset data file (e.g., setting preview for future program, target advertisement, etc. - see include, but are not limited to, paragraphs 0107-0112; Thomas, figures 1-12).

Regarding claim 22, Sim discloses the method as discussed in the rejection of claim 20. Sim further discloses coordinating uploading the associated metadata for the

multimedia asset data file to the VOD servers (coordinating uploading associated file metadata for content file to the CMS and/or distribution server (DS) – see include, but are not limited to, paragraphs 0102, 0104, 0209, 0213 and discussion in “response to arguments” above);

distributing file metadata and other information to each DS, edge server - see include, but are not limited to, figures 5-6, paragraphs 0209-0213, 0231-0232, 0238) and updating the metadata and other information cached/stored in distribution server/edge server (see include, but are not limited to, paragraphs 0238, 0166, 0238). However, Sim does not explicitly disclose a localized master schedule and providing a schedule update to each MSO at regular intervals.

E744 discloses distributing a localized master schedule to each MSO (distributing a program guide schedule according to geographic and/or local information to each of the television distribution facility/head end – see include, but are not limited to, figures 1-2c, paragraphs 0006-0007);

providing a schedule update to each MSO at regular interval (updating program guide schedule periodically - see include, but are not limited to, Thomas: paragraph 0035; E988: paragraph 0012). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as taught by E744 in order to yield predictable results such as to allowing the user to select/schedule a program to be view easily.

Regarding claim 23, Sim in view of E744 discloses the method as discussed in the rejection of claim 22. Sim in view of E744 further discloses tracking uploading the multimedia asset data files and the associated metadata to the VOD servers by reference to each MSO's localized master schedule (see include, but are not limited to, E744: paragraphs 0107-0108, 125-126).

Regarding claim 24, Sim in view of E744 discloses the method as discussed in the rejection of claim 22. Sim in view of E744 further discloses each schedule update comprises instructions for inserting and deleting multimedia asset data files from each MSO's localized master schedule (see include, but are not limited to, Sim: paragraphs 0186-0189, 0166-0167, 0238; E744: paragraphs 0107-0108, 0125-0126; Thomas, paragraph 0035, 0070-0075; E988: paragraph 0012).

Regarding claim 30, Sim discloses the method as discussed in the rejection of claim 29. However, Sim does not explicitly disclose business rules including at least one of a rating filter, a pricing rule, a category rule, and a platform conversion rule.

E744 further discloses a business rules including at least one of a rating filter, a pricing rule, a category rule, and a platform conversion rule (e.g., price of pay per view program, price for recording a program, rating information, or category information, etc.

- see include, but are not limited to, figures 5, 15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify

Sim with the teaching as further taught by E744 in order to yield predictable result such as allowing user to select desired information easily.

Regarding claim 31, Sim discloses the method as discussed in the rejection of claim 25. Sim does not explicitly disclose customizing an electronic program guide (EPG).

E744 discloses customizing an EPG (see include, but are not limited to, paragraphs 0074, 0077, 0085). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as further taught by E744 in order to allow user to select a desired program easily.

Regarding claim 32, Sim discloses the method as discussed in the rejection of claim 1. Sim further discloses using a browser to request content file (paragraph 0150). However, Sim does not explicitly disclose providing an interface to allow a user to view and analyze metadata and scheduling information associated with the content.

E744 discloses providing an interface to allow a user to view and analyzed metadata and scheduling information associated with the content (see include, but are not limited to, figures 6-8c, 18, 20a). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as further taught by E744 in order to allow user to select desired program easily.

Regarding claim 35, Sim discloses the method as discussed in the rejection of claim 25. Sim further discloses receiving a metadata locator corresponding to the content from the server (e.g., metadata including content ID, file name, etc. - see include, but are not limited to, paragraphs 0102, 0166-0167, 0172, 0188, 0209-0214 and discussion in "response to arguments" above);

receiving a schedule request from a server (see include, but are not limited to, paragraphs 0094-0096, 0204).

providing an asset locator to the server in response to the metadata locator, the server retrieving an element of the content from the content from a catcher using the asset locator (e.g., providing address, information, ID of the selected file to one of the distributing server and the distributing server retrieving an element of the requested file from a receiver of a distributing server using the address, or file ID – see include, but are not limited to, figures 5-8, paragraphs 0209-0213, 0231-0232, 0165-0167);

interacting with the server during transfer of the element of the content from the catcher (e.g., sending notification, ack, or usage information, etc. to the server during transfer of the element of the content from the receiver of one distribution server - see include, but are not limited to, paragraphs 0166-0167, 0204-0213, 0231-0232).

However, Sim does not explicitly disclose providing a customized or localized master schedule for the MSO to the server, the master schedule having an asset locator.

E744 discloses distributing a customized localized master schedule for the MSO to the server, the master schedule having an asset locator (distributing a customized

program guide schedule to television distribution facility/node, and the program guide having asset locator such as channel source, time, etc. — see include, but are not limited to, figures 1-2c, paragraphs 0006-0007). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as further taught by E744 in order to yield predictable results such as to allowing the user to select/schedule a program to be view easily.

Regarding claim 36, Sim in view of E744 discloses the method as discussed in the rejection of claim 35. Sim in view of E744 further discloses retransmitting the asset locator upon receiving an alarm from the server indicating that the asset locator is not received properly by the server (see include, but are not limited to, Sim: paragraphs 0166-0167, 0186-0191, 0204, 0209-0213, 0238).

Regarding claim 37, Sim in view of E744 discloses the method as discussed in the rejection of claim 35. Sim in view of E744 further discloses performing a follow up or diagnosis upon receiving an alarm from the server indicating that the element is not received properly by the server (see similar discussion in the rejection of claim 13).

6. Claims 41-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sim et al. (US 2002/0078174 A1) in view of Ellis et al. (US 2005/0283800A1 - hereinafter referred to as E800).

Note: all documents incorporate by references in E800 in their entirety are treated as portion of the specification of E800.

Regarding claim 41, the limitations of the system that correspond to the limitations of the method of claim 25 are analyzed as discussed in the rejection of claim 25, wherein the external layer to interface to an application client is interpreted as layer interface to application of content provider - see include, but are not limited to, figures 5, 7, paragraphs 0076, 0080, 0263-0269 and discussion in "response to arguments" above). Sim also discloses a relational database to store the metadata (see include, but are not limited to, figures 7, 20 and discussion in "response to arguments" above). Sim also discloses using API (paragraph 0032). However, Sim does not explicitly disclose a component programmatic application program interface (API) coupled to the external layer to interface to a plurality of engines.

E800 discloses API coupled to external layer to interface to a plurality of engines (see include, but is not limited to, figure 2 and discussion in "response to arguments" above). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as taught by E800 in order to reduce codes for program application and/or allow user to enter data easily.

Regarding claim 42, Sim in view of E800 discloses the system as discussed in the rejection of claim 41. Sim in view of E800 further disclose a business objects engine (e.g, engine in CMS) to manage business rules associated with the content, the

business rules being provided by the MSO (see include, but are not limited to, Sim: figure 5, 20, paragraphs 0186-0192, 0204-0214; E800: figure 2);

a package engine to manage packaging the content (see include, but are not limited to, Sim: figure 5, 20, paragraphs 0097, 0166-0167, 0186-0192, 0204-0214; E800: figure 2);

a scheduling engine to schedule deployment of the content (see include, but are not limited to, figure 5, 20, paragraphs 0094-0097, 0166-0167, 0186-0192, 0204-0214; E800: figures 2, 13, 15);

a platform converter engine to customize an electronic program guide (EPG) designated by the MSO (e.g., engine for sorting the EPG according to time, category, or user profile, etc. – see include, but are not limited to, figures 13, 15);

a localization engine to localize the content (e.g., component that locate content requested to be deleted or requested by the user - see include, but are not limited to, Sim: paragraphs 0166-0167; E800: figures 11-17).

Regarding claim 43, Sim in view of E800 discloses the system as discussed in the rejection of claim 41. E800 further discloses the external layer comprises a web service API to facilitate communication with an application used by one of the MSO and the content provider (see include, but are not limited to, figure 2).

Regarding claim 44, Sim in view of E800 discloses the system as discussed in the rejection of claim 43. Sim in view of E800 further discloses the Web service API

performs: registering the content (registering the content into CMS and/or DS, or television distribution facility, main facility, etc. – Sim: paragraphs 0076, 0086, 0094, 0166-0167; E800- figures 1-2);
receiving a confirmation call (e.g., “ack”, notification, etc.) from one of a pitcher and a catcher regarding status of transfer of an element of the content (see include, but are not limited to, Sim: paragraphs 0094, 0204-0209);
receiving a schedule request from the server for a schedule to distribute or upload the content (see include, but are not limited to, Sim: paragraphs 0086, 0094, 0166-0167; E800: figures 2, 12-15).

Regarding claim 45, Sim in view of E800 discloses the system as discussed in the rejection of claim 44. Sim in view of E800 further discloses receiving a metadata request from the server for localized package metadata;
receiving a reporting call from the server to deliver usage report (see include, but are not limited to, E800: figures 2, 12-16; Sim: paragraphs 0094-0095; 0108-0111; 0186-0192; 0217, 0253, 0270-0271).

Regarding claim 46, the limitations that correspond to the limitations of claim 41 are analyzed as discussed in the rejection of claim 41. Sim in view of E800 further discloses a server (e.g., content provider, CMS, or DS, etc. - see include, but are not limited to, Sim: figures 5-6, 14-18);

a distribution network coupled to the server to distribute content provided by a content provider (see include, but are not limited to, Sim: figures 5-6, 14-18);

a content management system (e.g., CMS) coupled to the server and the distributing network (see include, but are not limited to, Sim: figures 5-6, 14-18).

Regarding claims 47-50, the additional limitations that correspond to the additional limitations of claims 42-45 are analyzed as discussed in the rejection of claims 42-45.

Regarding claim 51, Sim in view of E800 discloses the system as discussed in the rejection of claim 46. Sim in view of E800 further discloses a pitcher used by the content provider to transmit the content and the metadata to the MSO via a distribution channel (e.g., transmitter at the content provider or CMS for transmitting content file and file metadata to the distribution server/edge server via a distribution channel - see include, but are not limited to, Sim: figures 5-13, paragraphs 0108-0111, 0086-0094, 0209-0213);

a catcher used by the MSO to receive transmission from the pitcher via a downlink channel (e.g., receiver at the CMS or distribution server for receiving transmission from the content provider/CMS via a distribution channel that provide the content and metadata - see include, but are not limited to, figures 5-13, paragraphs 0108-0111, 0086-0094, 0209-0213).

Regarding claim 52, Sim in view of E800 discloses the system as discussed in the rejection of claim 51. Sim does not explicitly disclose the distribution channel comprises a satellite uplink facility and a downlink channel comprises a satellite downlink facility. E800 further discloses distribution channel comprises a satellite uplink facility and a downlink channel comprises a downlink facility (see paragraph 0060). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sim with the teaching as further taught by E800 in order to yield predictable results such as to provide video content faster.

Regarding claim 53, Sim in view of E800 discloses the system as discussed in the rejection of claim 51. Sim in view of E800 further discloses one of the pitcher and the catcher communications with the content management system via a network connection (see include, but are not limited to, Sim: figures 5-13, paragraphs 0108-0111, 0086-0094, 0209-0213).

Regarding claim 54, Sim in view of E800 discloses the system as discussed in the rejection of claim 51. Sim in view of E800 further discloses the catcher receives the content locally using one of a physical medium, a local network, and a terrestrial based network (see include, but are not limited to, Sim: figures 5-13, paragraphs 0108-0111, 0086-0094, 0209-0213).

Regarding claim 55, Sim in view of E800 discloses the system as discussed in the rejection of claim 51. Sim in view of E800 further discloses the content is one of a VOD content, and asset data file, a broadcast content, and a network content (see include, but are not limited to, Sim: paragraphs 0080, 0115; E800: figure 2).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fransman et al. (US 7024681) discloses method and apparatus for near video on demand.

Russell et al. (US 2002/0069420) discloses system and process for delivery of content over a network.

Headings et al. (US 2002/0143565 A1) discloses digital entertainment service platform.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON P. HUYNH whose telephone number is (571)272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

